

***Synaptomys borealis sphagnicola* (Northern Bog Lemming)****Priority 1 Species of Greatest Conservation Need (SGCN)****Class:** *Mammalia* (Mammals)**Order:** *Rodentia* (Rodents)**Family:** *Cricetidae* (Hamsters, Voles, Lemmings, And Allies)**General comments:**

Found in small isolated populations and few populations have been found.

**Species Conservation Range Maps for Northern Bog Lemming:**Town Map: [Synaptomys borealis sphagnicola\\_Towns.pdf](#)Subwatershed Map: [Synaptomys borealis sphagnicola\\_HUC12.pdf](#)**SGCN Priority Ranking - Designation Criteria:****Risk of Extirpation:**Maine Status: **Threatened****State Special Concern or NMFS Species of Concern: NA****Recent Significant Declines: NA****Regional Endemic: NA****High Regional Conservation Priority:**

Northeast Endangered Species and Wildlife Diversity Technical Committee:

Risk: No, Data: No, Area: Yes, Spec: Yes, Warrant Listing: Yes, Total Categories with "Yes": 3

**High Climate Change Vulnerability: NA****Understudied rare taxa: NA****Historical: NA****Culturally Significant: NA****Habitats Assigned to Northern Bog Lemming:****Formation Name** **Alpine****Macrogroup Name** **Alpine****Habitat System Name:** Acadian-Appalachian Subalpine Woodland and Heath-Krummholz **\*\*Primary Habitat\*\*****Formation Name** **Boreal Upland Forest****Macrogroup Name** **Boreal Upland Forest****Habitat System Name:** Acadian-Appalachian Montane Spr-Fir-Hwd Forest **Notes:** May occur in boggy areas associated with this forest type**Stressors Assigned to Northern Bog Lemming:**

Stressor Priority Level based on Severity and Actionability		Moderate Severity	High Severity
	Highly Actionable	Medium-High	High
	Moderately Actionable	Medium	Medium-High
	Actionable with Difficulty	Low	Low

**IUCN Level 1 Threat** **Biological Resource Use****IUCN Level 2 Threat:** Logging and Wood Harvesting**Severity:** Moderate Severity**Actionability:** Highly actionable**Notes:** Usually northern bog lemmings occur in high elevation habitat that is not prone to logging. If their habitat is logged, and evaporation / transpiration increases as the result of the logging their wet mossy habitat could be lost.

***Synaptomys borealis sphagnicola* (Northern Bog Lemming)****Priority 1 Species of Greatest Conservation Need (SGCN)****Class:** *Mammalia* (Mammals)**Order:** *Rodentia* (Rodents)**Family:** *Cricetidae* (Hamsters, Voles, Lemmings, And Allies)**IUCN Level 1 Threat** Energy Production and Mining**IUCN Level 2 Threat:** Renewable Energy**Severity:** Moderate Severity**Actionability:** Highly actionable

**Notes:** Because northern bog lemmings often occur in high elevation sites, they may be vulnerable to wind farms. If a wind project alters the drainage of a site or opens a closed canopy forest, it may destroy northern bog lemming habitat. It is reversible problem because with site inspections the wind farm developer has the option of relocating the project.

**Species Level Conservation Actions Assigned to Northern Bog Lemming:**

*\*Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.*

<b>Conservation Action</b>	<b>Category:</b> Policy	<b>Biological Priority:</b> moderate	<b>Type:</b> on-going
Develop a policy where the Maine Forest Service or LURC would notify IFW of forest management plans where cutting was planned on high elevation sites (above 2,700 feet)			

**Stressor(s) Addressed By This Conservation Action**

Logging and Wood Harvesting

<b>Conservation Action</b>	<b>Category:</b> Research	<b>Biological Priority:</b> moderate	<b>Type:</b> new
Develop a technique to identify northern bog lemmings using e-DNA found in small water bodies associated with alpine sites			

**Stressor(s) Addressed By This Conservation Action**

Logging and Wood Harvesting

**Guild Level Conservation Actions:**

This Species is currently not attributed to a guild.

**Broad Taxonomic Group Conservation Actions:**

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

**Habitat Based Conservation Actions:**

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

*The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.*